

# Recessions, Older Workers, and Longevity: How Long Are Recessions Good For Your Health?



Courtney Coile, Phillip Levine, Robin McKnight  
(Wellesley College and NBER)

# Issue: Recessions and Health

- Is a recession really good for your health?
  - Ruhm (2000): mortality rates fall during recessions
  - finding seems robust
    - Other Ruhm papers
    - Miller, et al./Stevens, et al. papers
- Are some workers adversely affected?
  - Displaced workers face increases in both short- and long-term mortality during recession
    - Sullivan and von Wachter (2009)
    - Problems of these workers greater than average worker
  - Our question: what about workers approaching retirement?
    - We know short-term effects are similar
    - what about long-term effects?

# Are Older Workers Different?

- They may “limp across the finish line” following a recession
  - long durations of unemployment (GAO)
  - increased retirement rates, starting at age 62 (Coile and Levine)
- Potential Direct Mechanisms on Long-term health
  - Extended period with lower employment/income leading up to retirement and later retirement income
  - Lengthy gap in health insurance/health care at time of increasing need
- Potential Indirect Mechanisms
  - Own job stress, spillover from relatives, friends, and colleagues, reduced community resources, etc.
- **Purpose of study: examine impact of recessions on subsequent mortality, focusing on those workers approaching retirement age when recession hits.**

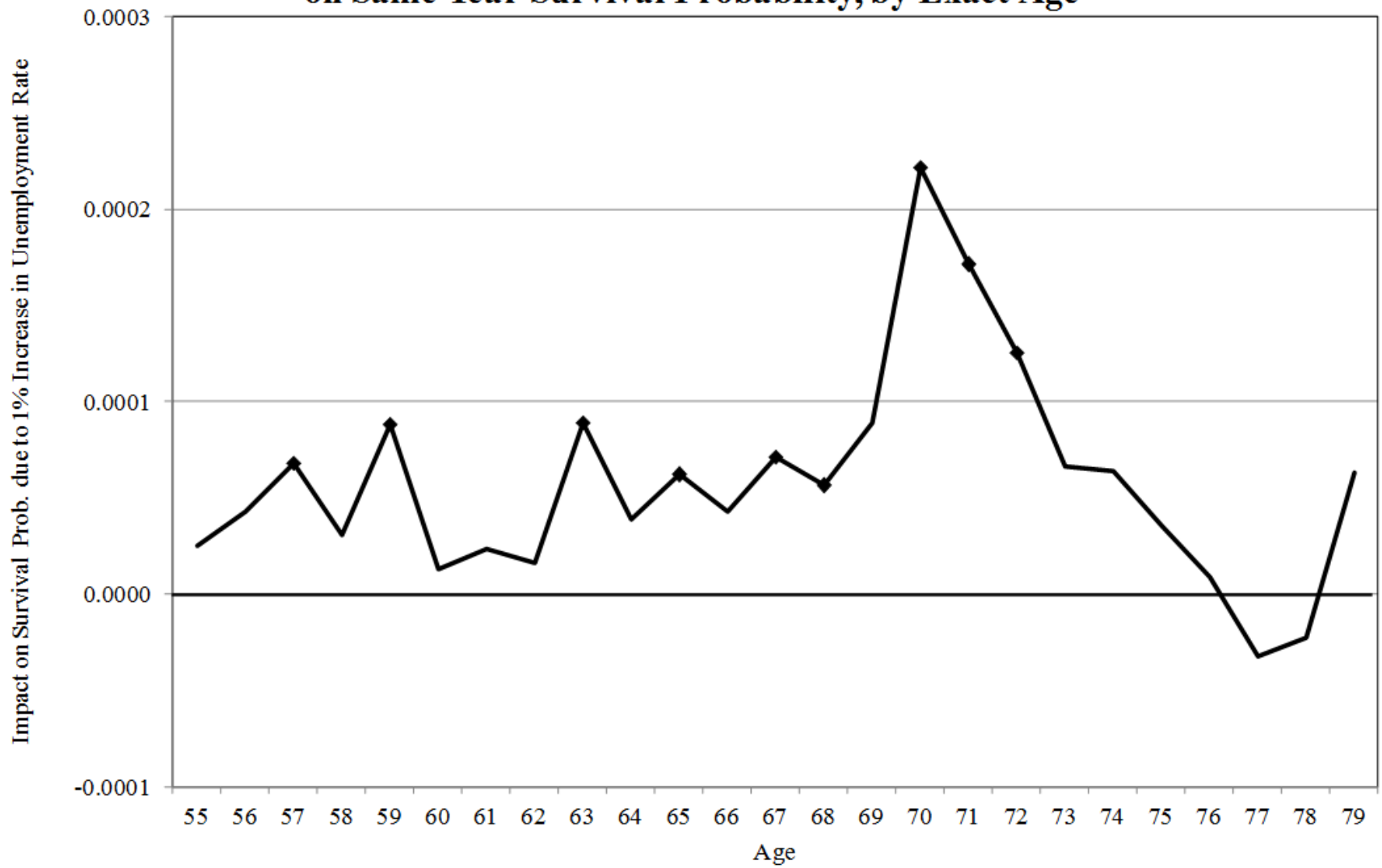
# Methods

- Replicate existing results
  - Regress current year mortality on current year unemp. rate by age
  - Also include other Xs, state and year FE, and state-specific linear trends
- Our Model for Survival:
  - Goal : extend model to include survival to subsequent ages
  - Key Independent variable = unemp. rate at particular age (say, 58)
  - Dependent variable = survival between that age and subsequent ages (59, 60, 61, ... sequentially up to age 79)
  - Specification is similar otherwise
- Other Outcomes
  - New dep. vars. (employment, health ins. coverage, health care utilization)
  - Similar methods: link base year unemp. rate to subsequent outcome

# Data

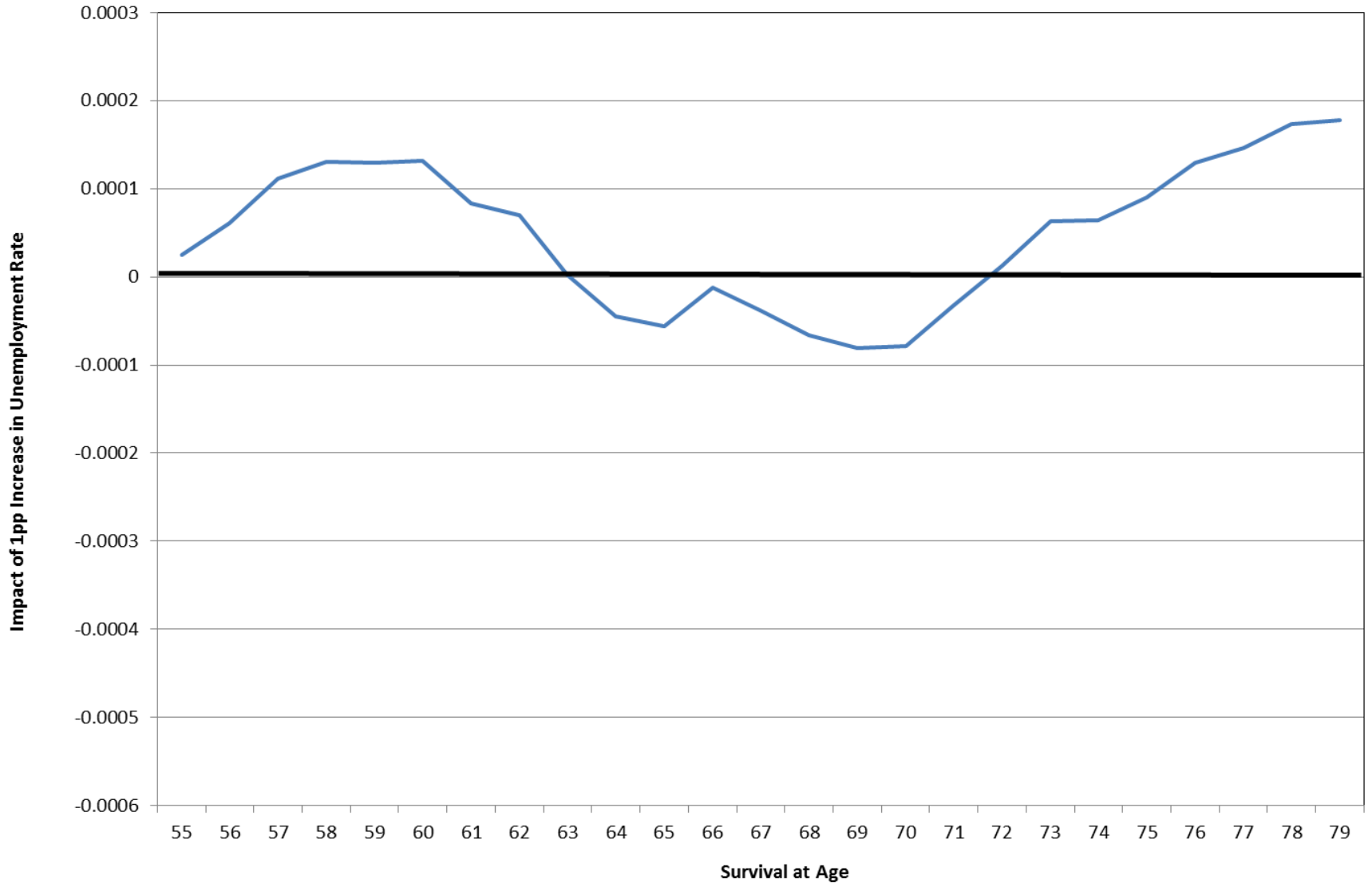
- Mortality Rates
  - Vital Statistics Mortality data
  - SEER population data
- Survival Rates
  - Start at 100 percent survival at beginning of base year
  - Use mortality rates at each age to construct survival rates
  - Full set of survival rates from ages 55 to 78 to each age between starting age and age 79.
- Cohorts used
  - 1910 through 1929 birth cohorts
- Data for Other Outcomes
  - CPS, BRFSS

**Figure 2: Impact of Unemployment Rate on Same Year Survival Probability, by Exact Age**

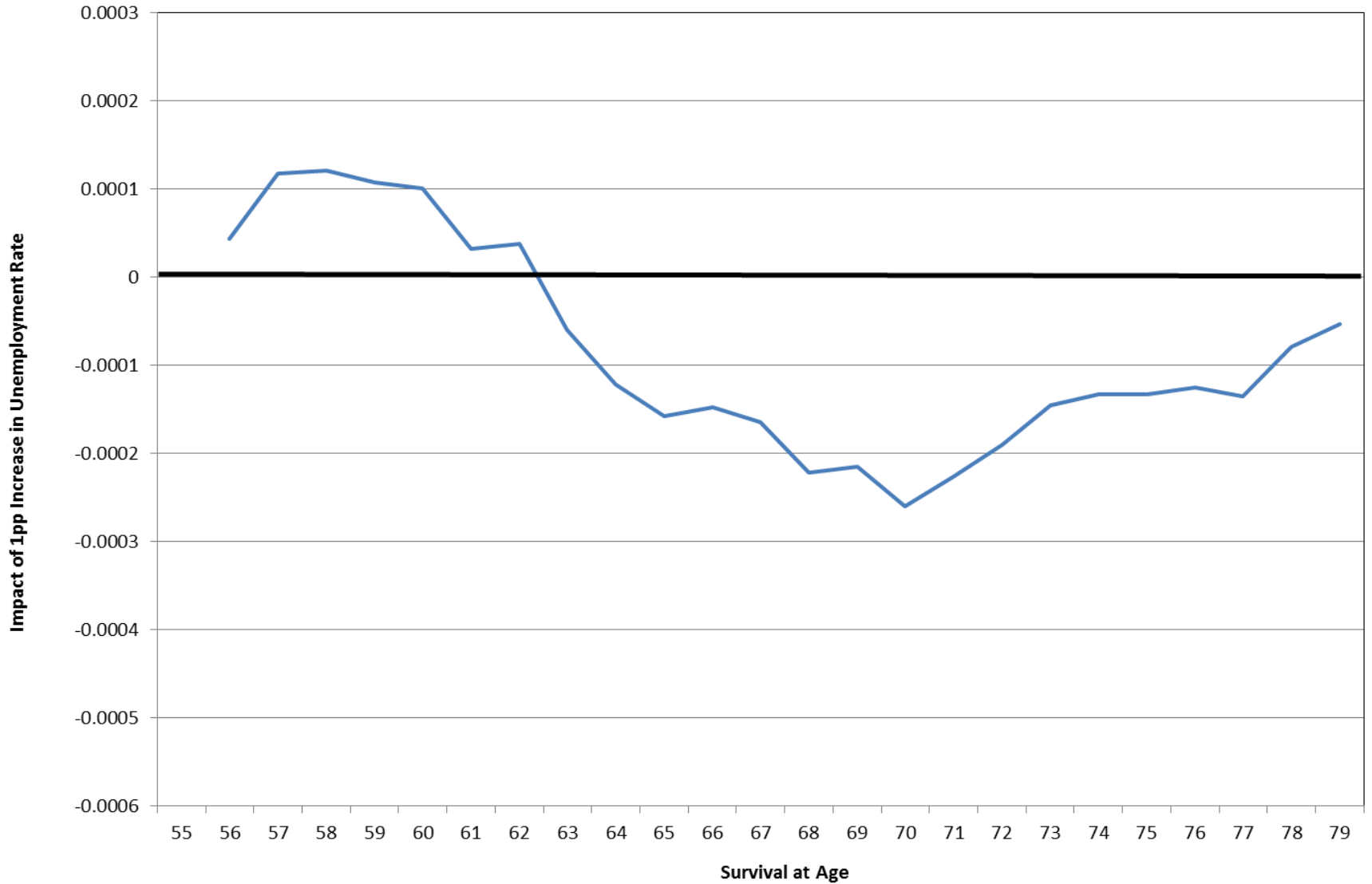


note: diamonds represent statistically significant (at the 5% level) estimates.

# Impact of Unemployment Rate at Age 55 on Subsequent Survival Probabilities

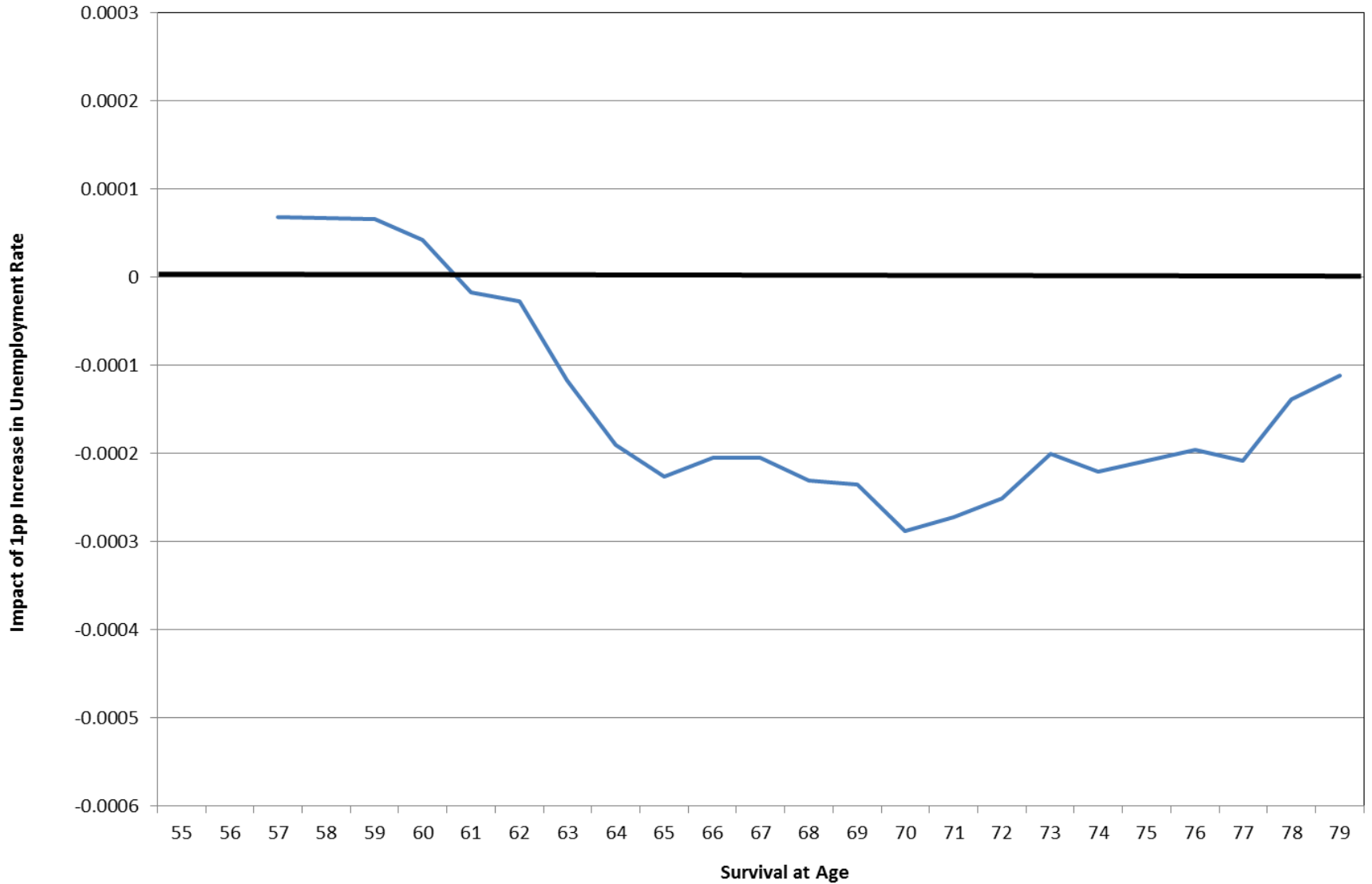


## Impact of Unemployment Rate at Age 56 on Subsequent Survival Probabilities

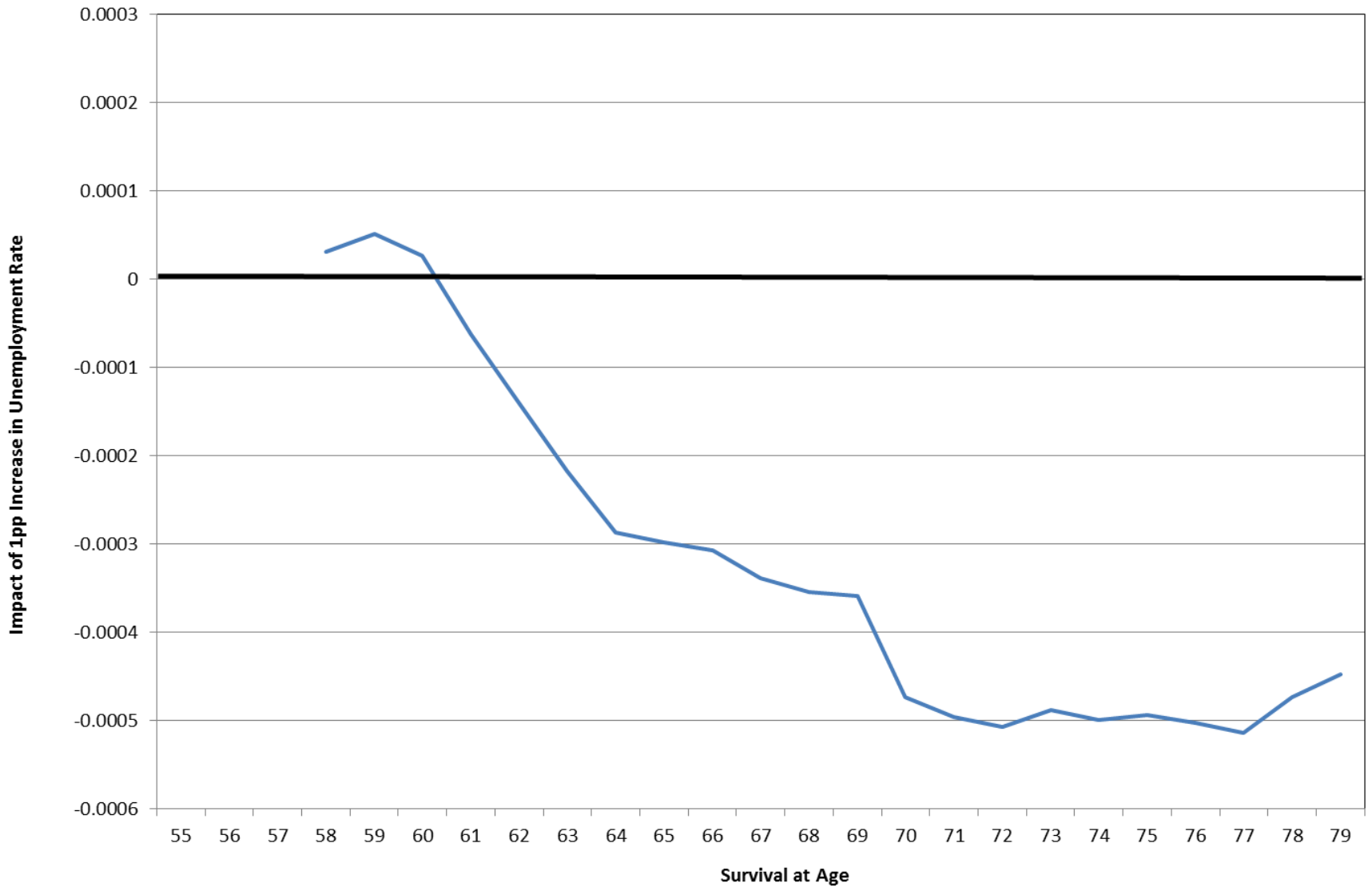




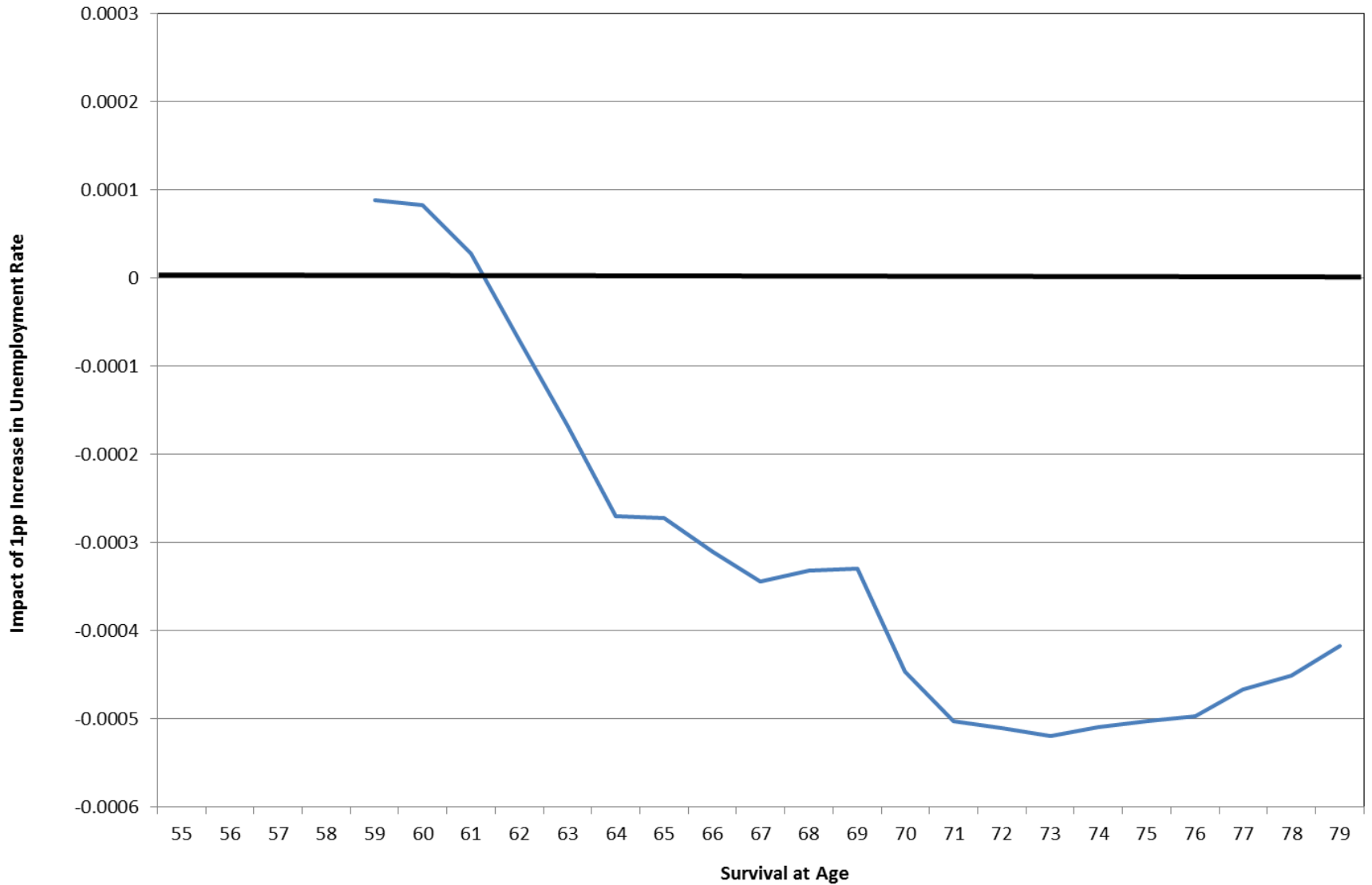
# Impact of Unemployment Rate at Age 57 on Subsequent Survival Probabilities



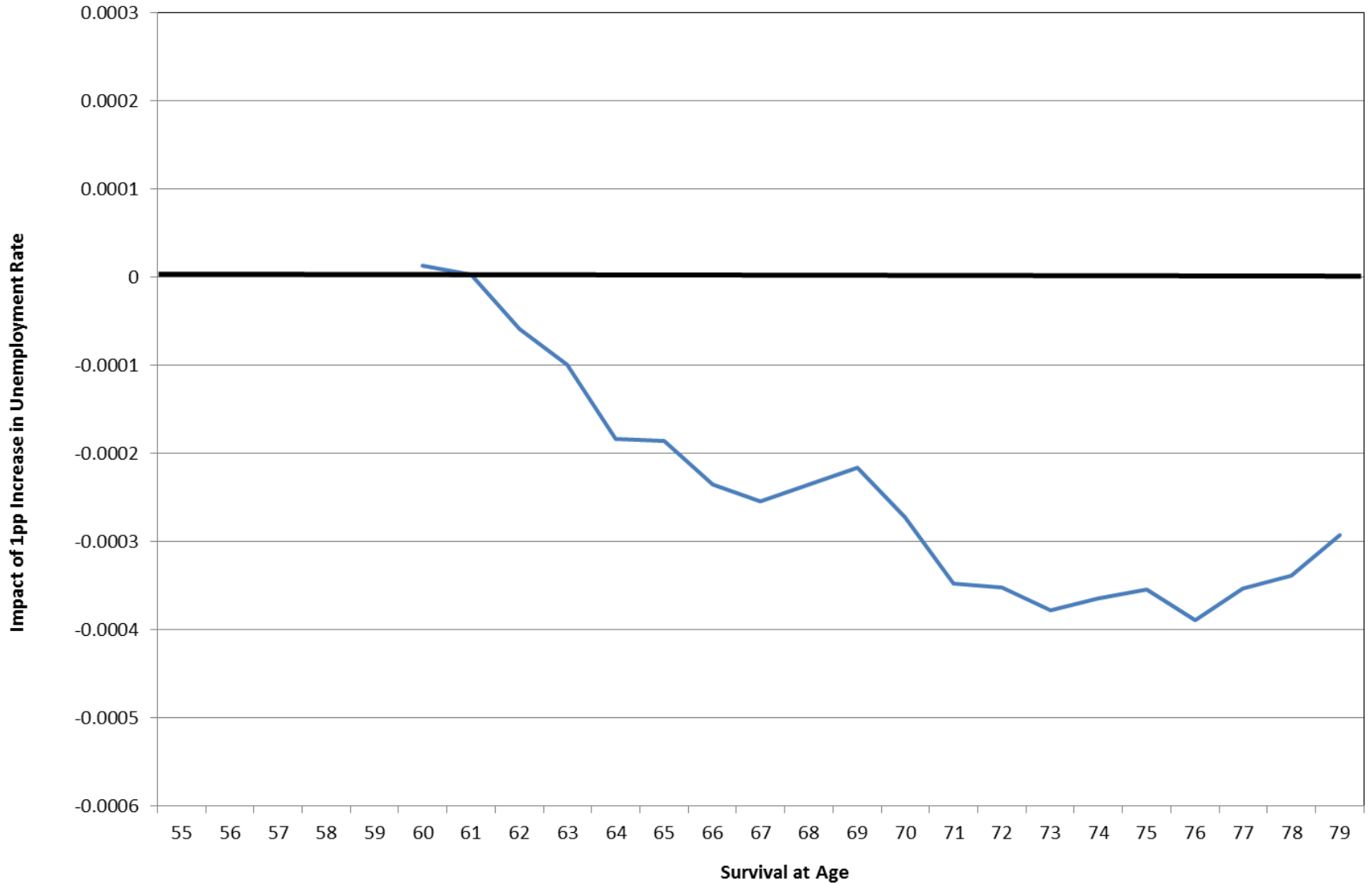
# Impact of Unemployment Rate at Age 58 on Subsequent Survival Probabilities



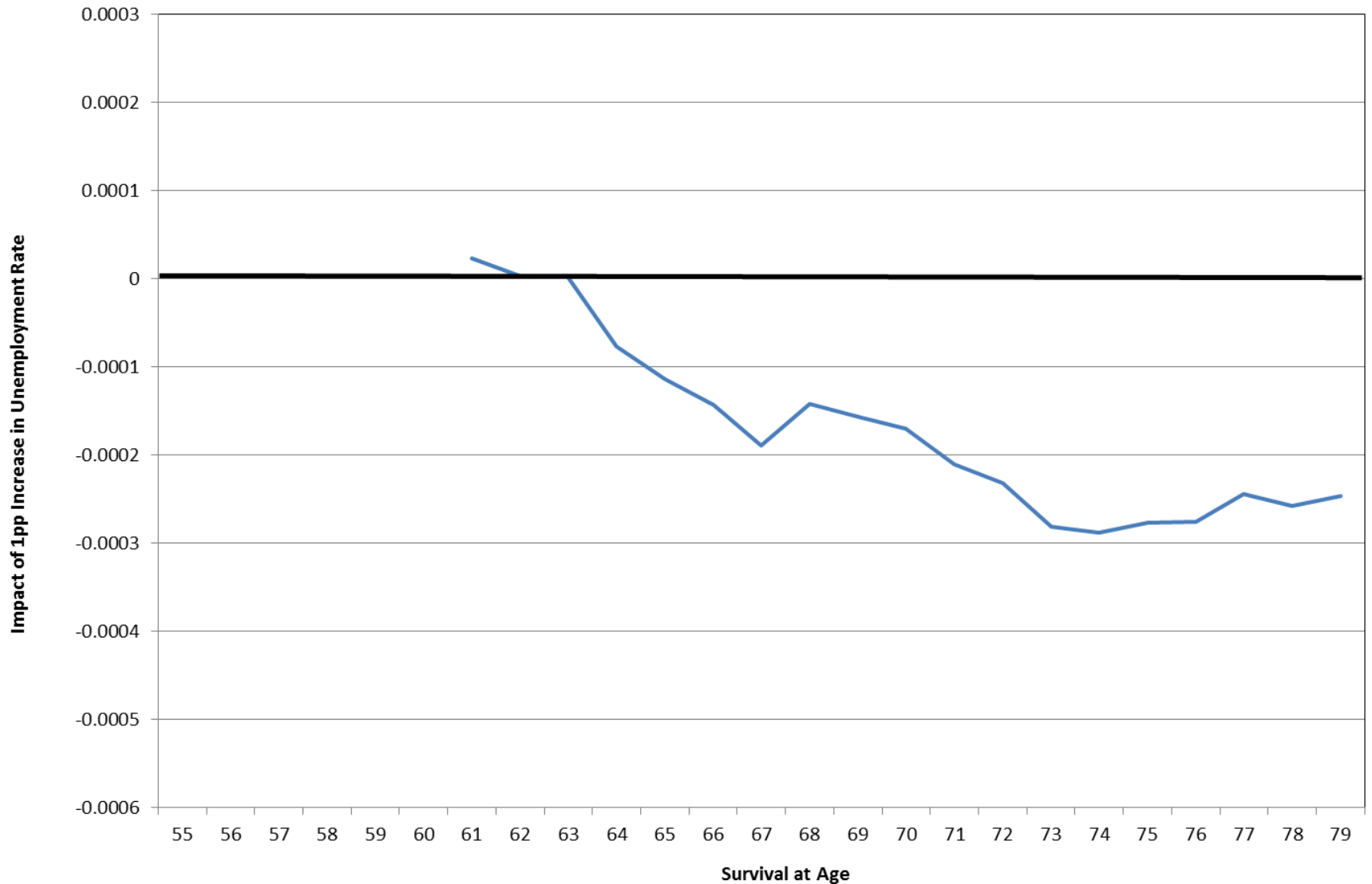
# Impact of Unemployment Rate at Age 59 on Subsequent Survival Probabilities



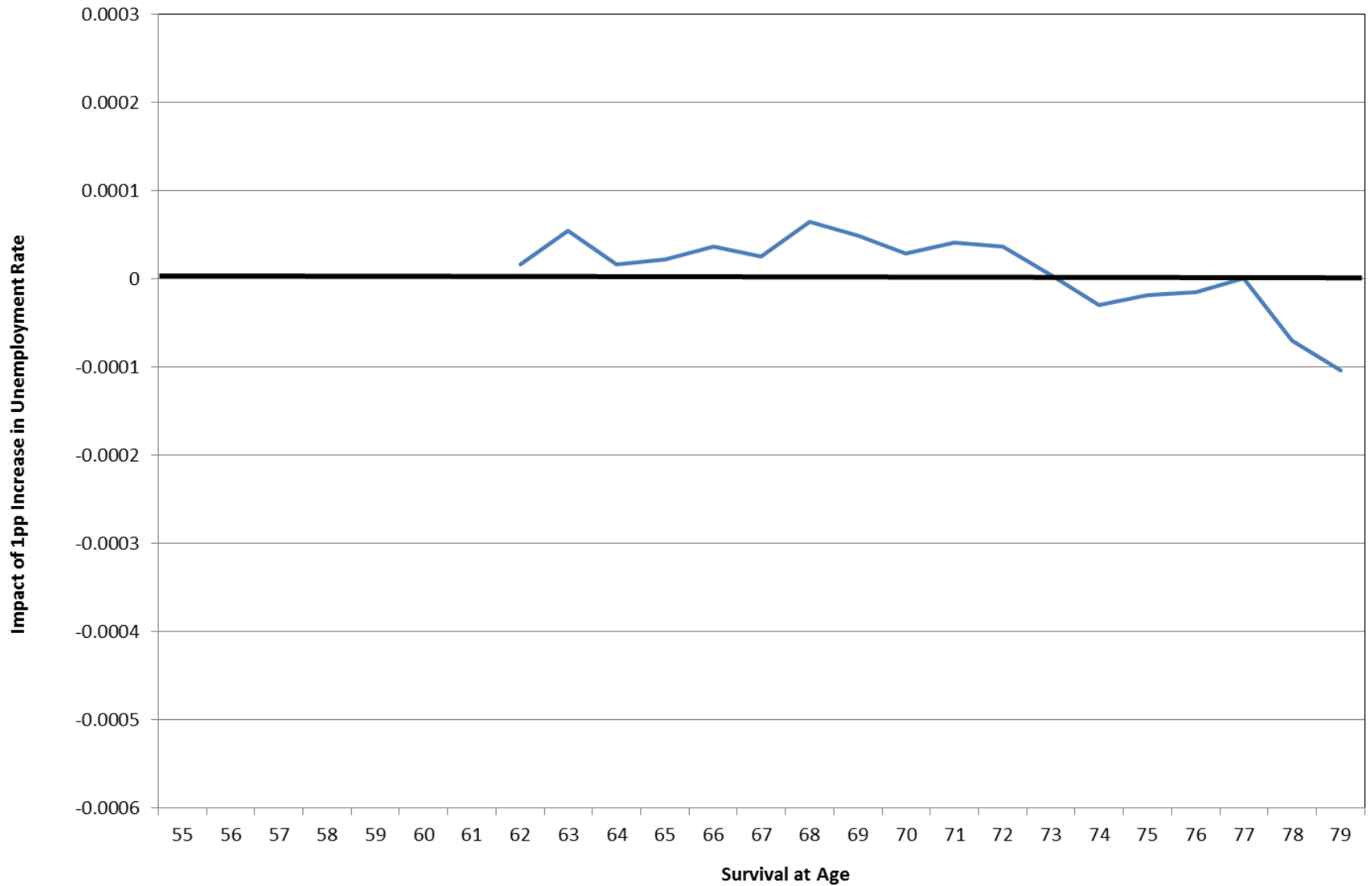
# Impact of Unemployment Rate at Age 60 on Subsequent Survival Probabilities



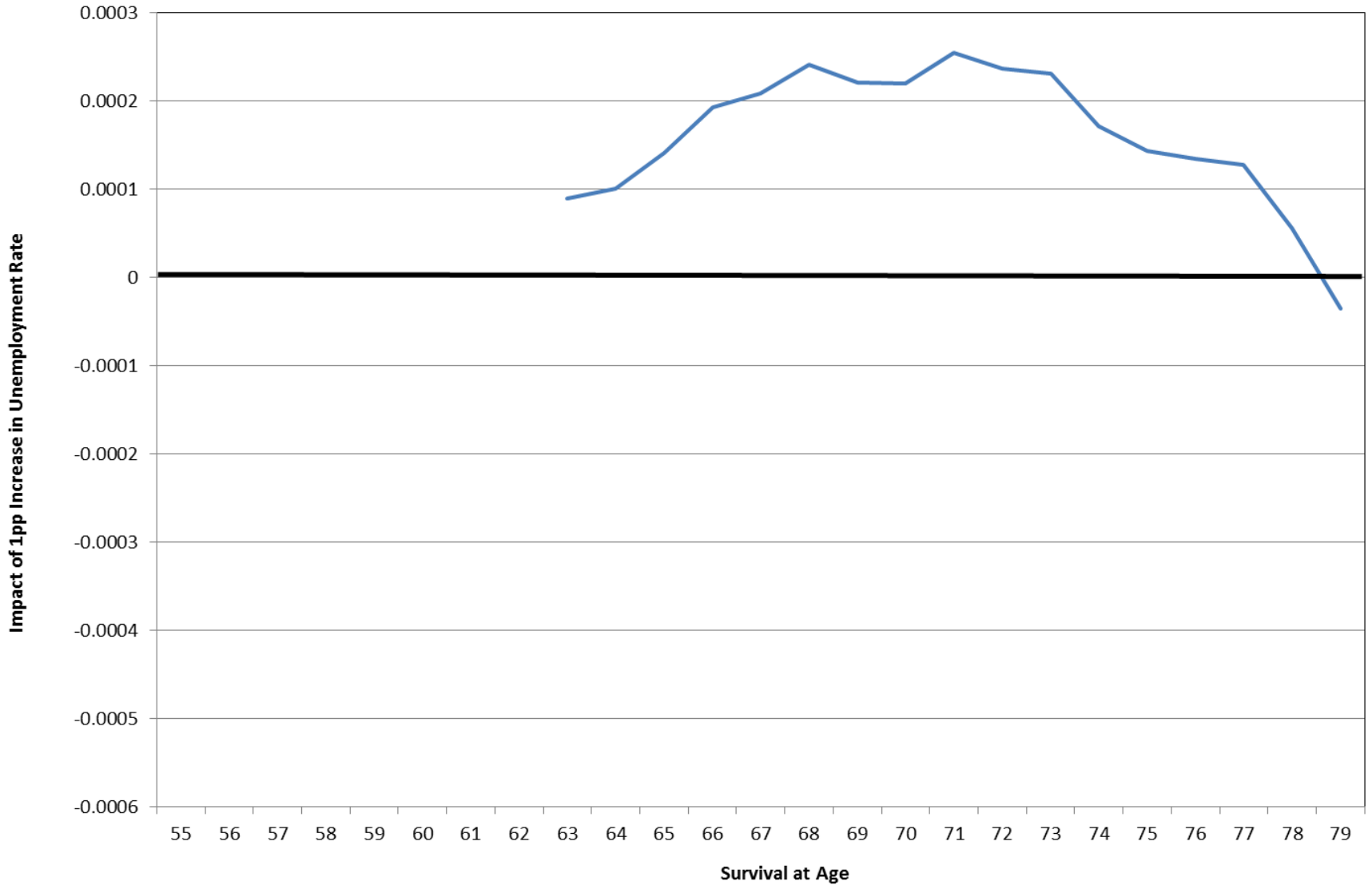
## Impact of Unemployment Rate at Age 61 on Subsequent Survival Probabilities



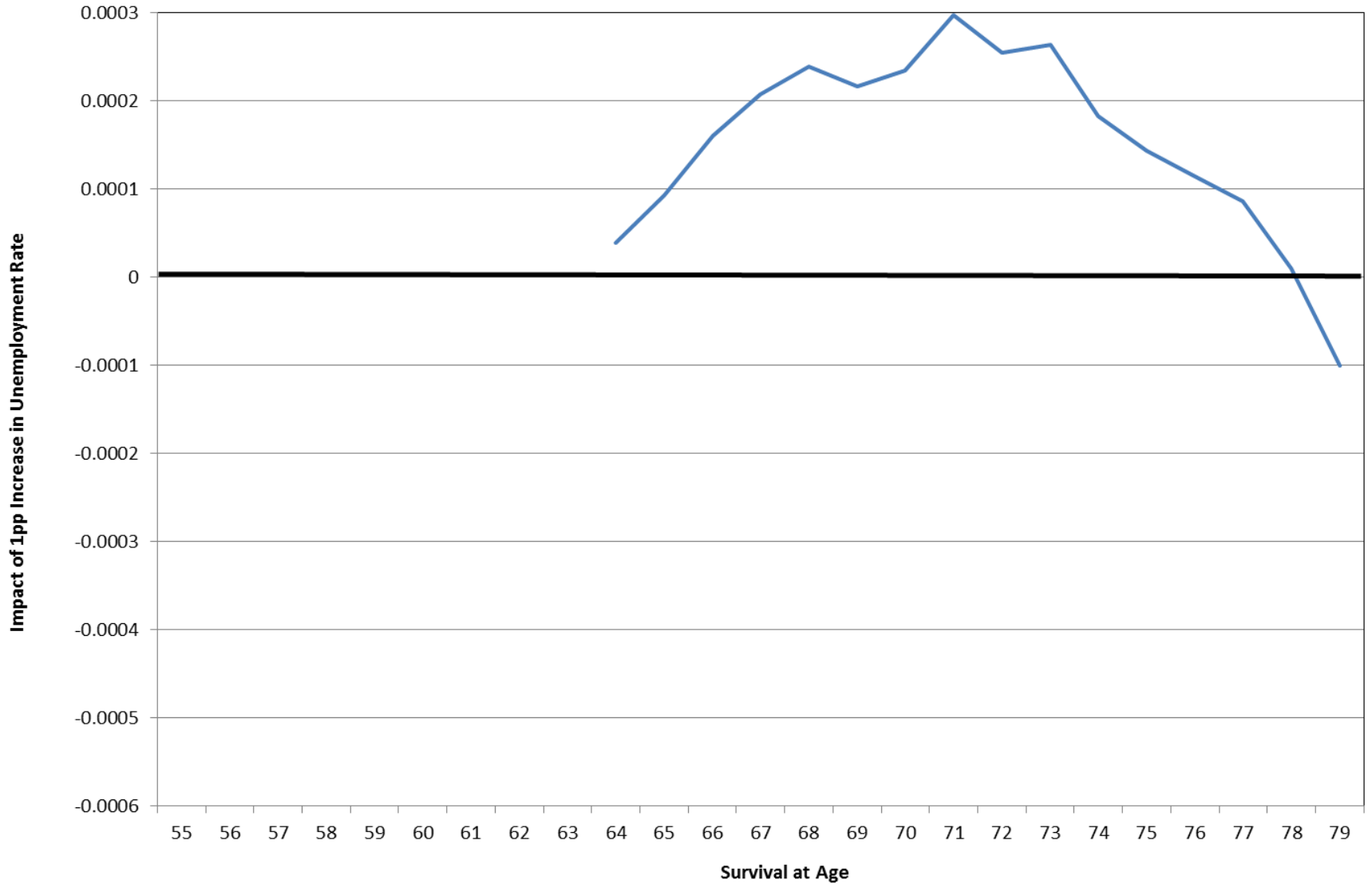
# Impact of Unemployment Rate at Age 62 on Subsequent Survival Probabilities



## Impact of Unemployment Rate at Age 63 on Subsequent Survival Probabilities

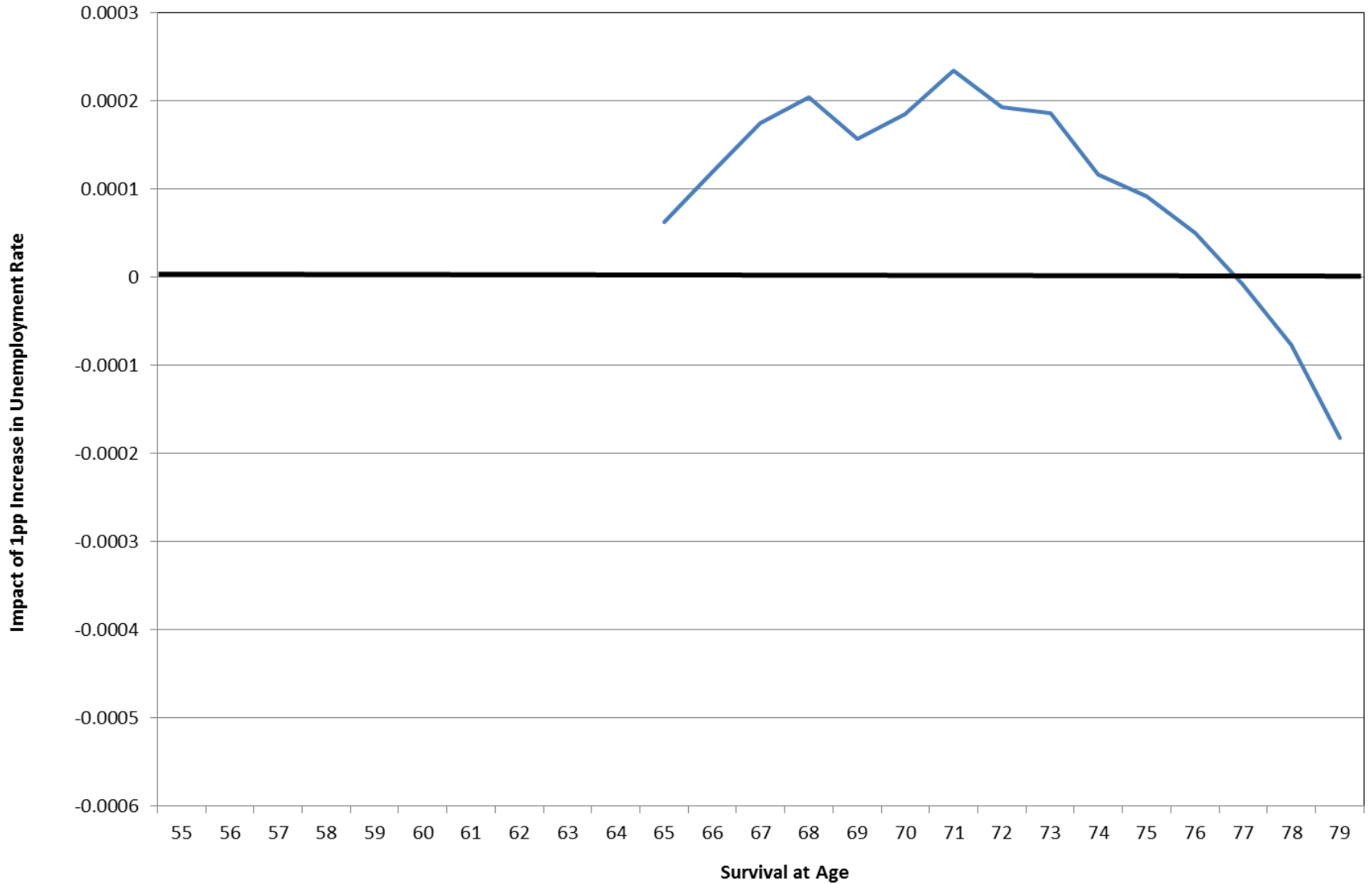


## Impact of Unemployment Rate at Age 64 on Subsequent Survival Probabilities

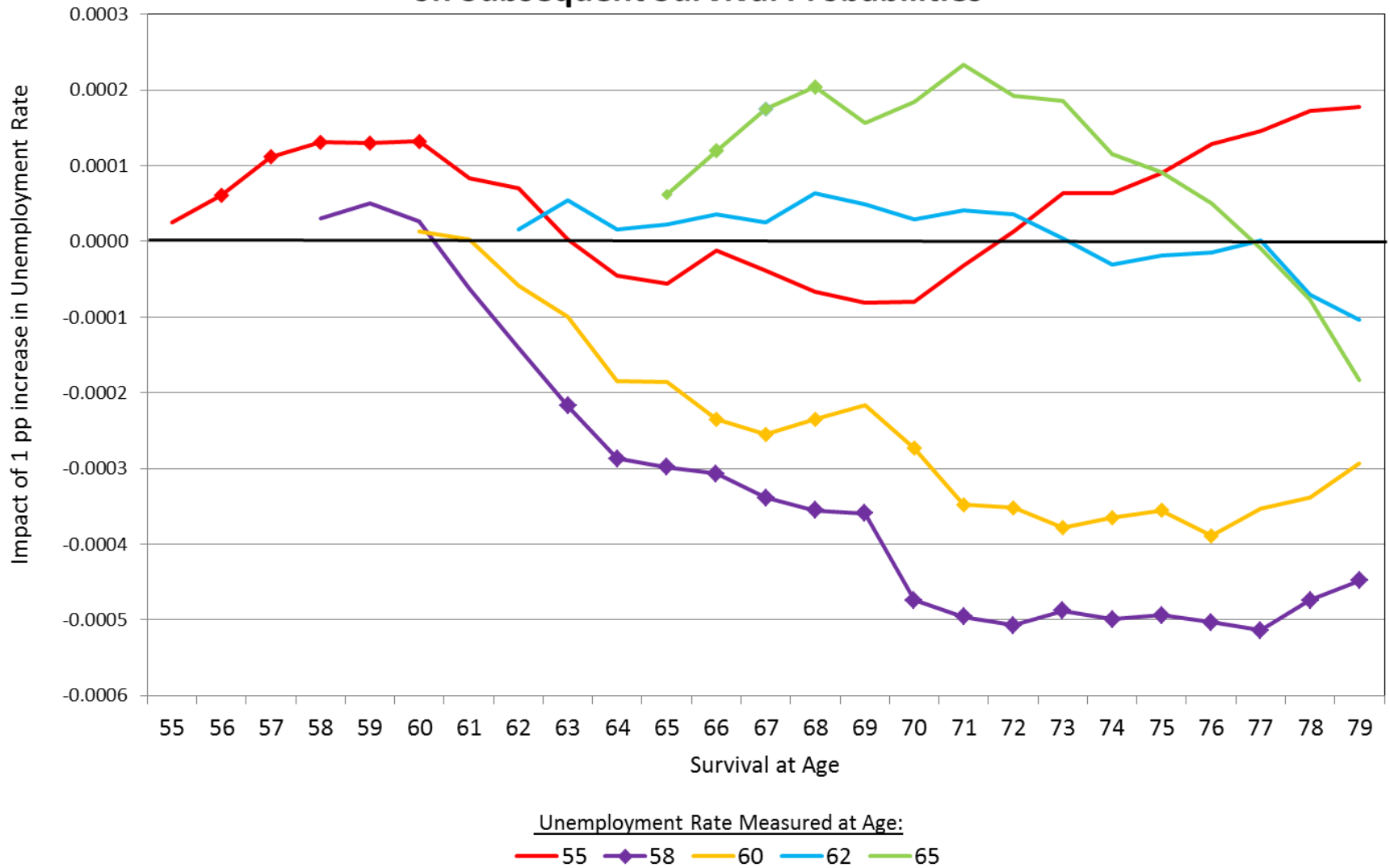




# Impact of Unemployment Rate at Age 65 on Subsequent Survival Probabilities



### Figure 3: Impact of Unemployment Rate at Various Ages on Subsequent Survival Probabilities



note: diamonds represent statistically significant (at the 5% level) estimates.

# Summary of Results

- Replicate past findings on short-term impact
- For workers in late 50s through age 61
  - any short-term benefits are reversed
  - Long-term reduction in survival probabilities
- Evidence on potential direct mechanisms
  - Lengthy periods of reduced employment
  - Lengthy spells without insurance coverage
  - More likely to avoid doctor visit due to cost

# Magnitude of Estimates

- impact of a one point increase in UR at age 56-58
  - $\approx$  .5 point reduction in employment through age 64
  - $\approx$  .25 point reduction in private HI/doctor visit through age 64
    - $\approx$  Half those who lose jobs also lose health insurance and avoid going to doctor due to cost
  - $\approx$  .045 point reduction in prob. of surviving from age 58 to age 79
  - if entire effect through job loss (so estimates are upper bounds):
    - $\approx$  1 in 10 workers who lost jobs die earlier
    - life expectancy from age 55 for job losers falls by around 3 years

# Policy Implications

- Policy Relevant Findings
  - unemployment shocks at or after age 62 have no long-term negative health effects
  - Impact on health insurance coverage and health care use ends at 65
- These ages are not random numbers!
- Findings are strongly suggestive of the beneficial effect of Social Security and Medicare